

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

On the Commissioner's Own Motion for a Determination of the Adequacy of Warning Devices at the Grade Crossing of the Wisconsin Central Ltd. Tracks with STH 80 (Main Street) in the Village of Necedah, Juneau County

9164-RX-592

FINDINGS OF FACT AND ORDER

On March 3, 2005, the Commissioner of Railroads directed the staff of the Office of the Commissioner of Railroads (OCR) to investigate the adequacy of warning devices under §195.28, Stats., at the grade crossing of the Wisconsin Central Ltd. (WCL) tracks with STH 80 in the Village of Necedah, Juneau County (Crossing No. 392 665B / MP 11.44).

An OCR investigator inspected the crossings in March 2005. No hearing was held.

Findings of Fact

THE COMMISSIONER FINDS:

STH 80 (Main Street) is 40' wide between curbs with a 4'-wide sidewalk on the west side. STH 80 intersects the tracks at an angle of 41°. STH 80 carried 6400 ADT (average daily traffic) in 2001. The speed limit on STH 80 (Main Street) is 25 mph north of the crossing and 40 mph south of the crossing. STH 80 (Main Street) intersects 9th Street less than 75' south of the crossing.

The WCL operates 6 train movements per day over the crossing at a timetable speed of 40 mph. The crossing consists of one mainline track. The track curves sharply to the north beginning about 150' east of the crossing.

The exposure factor at this crossing is about 38,000. The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

One train-vehicle accident has occurred at this crossing since 1973. The accident occurred in 1990.

The Wisconsin Department of Transportation has produced a benefit-cost analysis for all at-grade crossings in the state. Installing new automatic flashing lights with gates and constant warning time circuitry at the STH 80 (Main Street) crossing has a net benefit of about \$447,000. The benefit-cost ratio is about 3.59 meaning that the public will receive \$3.59 in safety benefits for each dollar expended.

Accidents that do occur here will likely be quite serious if a through train is involved due to their 40 mph speed. Train speed is strongly correlated with fatalities in train/vehicle accidents. More specifically, crossings with train speeds of 40 mph and over have a disproportionate number of fatalities. According to Federal Railroad Administration (FRA) statistics, nationally, in 1994 71% of fatalities occurred at crossings with train speeds of 40 mph+, even though only 26% of all crossings had train speeds of 40 mph+.

The crossing presently has advance warning signs and 12" incandescent automatic flashing lights for warning devices, including sidelights for 9th Street, which intersects STH 80 (Main Street) immediately north of the tracks. The existing warning devices are inadequate. The existing warning devices will be adequate until such time as the new warning devices are installed. In order to adequately protect public safety 12" LED automatic flashing lights with gates and constant warning time circuitry are needed.

Constant warning time circuitry adjusts for train speed and causes the crossing signals to always operate for the same amount of time before the train reaches the crossing, regardless of train speed. A motion detector simply detects the train operation, but does not adjust for train speed so that the amount of warning time varies based on train speed.

Light emitting diodes (LED) lamps replace incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

Source of funding: The cost of the signal materials and the labor to install the signals shall be split 50% from DOT hazard elimination safety funds and 50% from the WCL.

Conclusion on the Issue

THE COMMISSIONER CONCLUDES:

That in order to adequately protect and promote public safety, it is necessary to install and maintain 12" LED automatic flashing lights with gates and constant warning time circuitry at the crossing of the tracks of Wisconsin Central Ltd. with STH 80 (Main Street) in the Village of Necedah, Juneau County.

Conclusion of Law

THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §195.28, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

Order

THE COMMISSIONER ORDERS:

1. That the **Wisconsin Central Ltd.** shall install and maintain 12" LED automatic flashing lights with gates, and constant warning time circuitry with appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with STH 80 (Main Street) at-grade in the Village of Necedah, Juneau County by **December 31, 2007** (Crossing No. 392 665B / MP 11.44).

2. That the **Wisconsin Central Ltd.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.

3. That the signal installation work herein ordered shall not begin until the district office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.

4. That to the extent feasible the **Wisconsin Central Ltd.** shall re-use the existing signal equipment.

5. That the cost of the signal materials and the labor to install the signals shall be split 50% from the **State of Wisconsin** hazard elimination safety funds and 50% from the **Wisconsin Central Ltd.** The **Wisconsin Central Ltd.** shall also bear any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.

6. That if the petitioner, railroad or any interested party objects to this order and requests a hearing within 20 days of the date of this order in writing, the Office will hold a public hearing.

7. That jurisdiction is retained.

Dated at Madison, Wisconsin, _____ (July 19, 2006)_____.

By the Office of the Commissioner of Railroads.

Rodney W. Kreunen
Commissioner of Railroads

